

Comparisons of Job Characteristics

Focus Occupation: [Bus and Truck Mechanics and Diesel Engine Specialists \(49-3031\)](#)

Associated Occupation: [Mechanical Engineering Technicians \(17-3027\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 70

Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)

Associated Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mechanical	6.8	18.0	21.1	>	Current knowledge level is likely sufficient
Engineering and Technology	5.7	16.1	6.1	<<	Extensive education and/or training may be required
Design	5.2	15.1	5.4	<<	Extensive education and/or training may be required
Production and Processing	6.0	12.6	3.3	<<	Extensive education and/or training may be required
Physics	4.3	10.2	5.9	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 52

Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)

Associated Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	10.7	10.0	0	Current skill level may be sufficient
Quality Control Analysis	5.9	10.2	9.4	0	Current skill level may be sufficient
Operation and Control	5.4	9.0	9.7	0	Current skill level may be sufficient
Troubleshooting	4.5	7.3	11.0	>>	Skill level is likely more than sufficient
Equipment Maintenance	3.5	6.8	10.2	>>	Skill level is likely more than sufficient
Repairing	3.4	6.6	11.2	>>	Skill level is likely more than sufficient
Equipment Selection	3.3	6.2	7.5	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 62			
Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031) Associated Occupation: Mechanical Engineering Technicians (17-3027)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Category Flexibility	9.0	10.7	9.0	<	Some improvement in abilities may be required
Control Precision	6.6	10.2	12.3	>	Current ability level is likely sufficient
Visualization	7.5	10.2	9.5	0	Current ability level may be sufficient
Number Facility	6.3	9.7	4.1	<<	Extensive improvement in abilities may be required
Perceptual Speed	7.4	9.6	7.9	<	Some improvement in abilities may be required
Visual Color Discrimination	6.4	9.2	9.2	0	Current ability level may be sufficient
Wrist-Finger Speed	3.2	5.5	5.6	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 78
Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031) Associated Occupation: Mechanical Engineering Technicians (17-3027)		
Work Activities	Exclusivity of Activity	
Diagnose mechanical problems in machinery or equipment	65	
Operate pneumatic test equipment	82	
Read blueprints	10	
Read schematics	34	
Read technical drawings	7	
Read vehicle manufacturer's specifications	76	
Set up and operate variety of machine tools	62	
Understand service or repair manuals	40	
Understand technical operating, service or repair manuals	6	
Use electrical or electronic test devices or equipment	40	
Use knowledge of metric system	39	

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 83

Focus Occupation: Bus and Truck Mechanics and Diesel Engine Specialists (49-3031)
Associated Occupation: Mechanical Engineering Technicians (17-3027)

Tools and Technologies	Exclusivity
Computer data input devices	2
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Electrical measuring and testing equipment	7
Face and head protection	7
Forming tools	2
Heating equipment and parts and accessories	19
Holding and clamping tools	3
Indicating and recording instruments	2
Industry specific software	1
Length and thickness and distance measuring instruments	2
Machine tools	7
Machinery for working wood and stone and ceramic and the like	12
Measuring and layout tools	3
Mechanical instruments	14
Power tools	2
Pumps	9
Rough and finishing tools	5
Safety apparel	4
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vision protection and accessories	3
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.